

ventilating means rotated together with the rotor; and

a rectifier unit cooled by the ventilating means, the rectifier unit comprising:

cooling plates for the positive-electrode and negative-electrode sides disposed at a predetermined interval and each having principal planes opposing each other; and

at least one diode package disposed between the cooling plates for the positive-electrode and negative-electrode sides, the at least one diode package consisting of:

an AC input terminal;

at least one unidirectionally conducting element for the positive-electrode side;

at least one unidirectionally conducting element for the negative-electrode side having a cathode face joined to an anode face of the at least one unidirectionally conducting element for the positive-electrode side by interposing the AC input terminal therebetween;

at least one base for the positive-electrode side formed of a metallic plate, wherein each of the at least one base for the positive electrode side is joined to a cathode face of one of the at least one unidirectionally conducting element for the positive-electrode side;

at least one base for the negative-electrode side formed of a metallic plate, wherein each of the at least one base for the negative electrode side is joined to an anode face of one of the at least one unidirectionally conducting element for the negative-electrode side; and

an insulating resin provided so that the at least one unidirectionally conducting elements for the positive-electrode side and the at least one unidirectionally conducting elements for the negative-electrode side are embedded therein, and the at least one base for the positive electrode side and the at least one base for the negative-electrode side are at least partially embedded therein, wherein at least end faces of the respective bases for the positive-electrode and negative-electrode sides are exposed therefrom on both sides in the depositing direction of the unidirectionally conducting elements for the positive-electrode and negative-electrode sides, and the top end of the AC input terminal extends from the resin;

wherein the end face of the at least one base for the positive-electrode side is joined to the principal plane of the cooling plate for the positive-electrode side, and the end face of the at least one base for the negative-electrode side is joined to the principal plane of the cooling plate for the negative-electrode side.